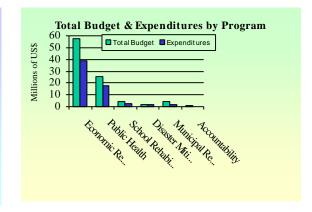
USAID Nicaragua Supplemental Reconstruction Programs Response to Hurricane Mitch, October 1998 Status as of March 31, 2001

MAY 1999 SUPPLEMENTAL RECONSTRUCTION FUNDS	TOTAL BUDGET	OBLIGATIONS	COMMITMENTS	EXPENDITURES
(CACEDRF)	\$94,108,000	\$94,108,000	\$91,890,405	\$61,776,664





Impact of Hurricane Mitch

Hurricane Mitch was the worst natural disaster in Nicaragua's history. Over 3,000 people lost their lives, with the most tragic loss occurring at Posoltega where some 2,000 died in one huge landslide. Eighteen percent of the total population, 870,000 people, were affected by the storm.

The productive sector was hit particularly hard. An estimated 11,550 hectares of agricultural land were destroyed. Another 308,000 hectares (25% of the country's total cropland) were seriously damaged. Potable water and wastewater systems serving 804,000 people suffered over \$560 million worth of damage. Ninety health centers and more than 400 health posts were damaged. Over 500 primary schools were damaged structurally. Total damages are estimated at U.S. \$1.5 billion – 70 percent of Nicaragua's 1998 Gross Domestic Product.

Initial USAID Response

Immediately after the hurricane struck, the United States provided nearly \$22 million in

emergency humanitarian and food assistance. USAID reallocated an additional \$8 million to jump-start reconstruction activities in the public health, agriculture and micro-finance areas prior to the passage of the Supplemental Reconstruction funds in May 1999.

Reconstruction Programs

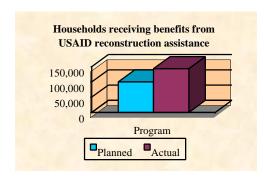
Based on disaster assessments, pledges from other donors and an analysis of USAID's capabilities, USAID decided to use Supplemental Funds to support reconstruction in the following areas:

Economic Reactivation

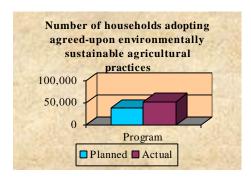
USAID targeted its assistance to restore the economic livelihood of 100,000 farmers, laborers and microentrepreneurs. This includes rehabilitating or improving 1,375 kilometers of farm to market roads (thereby opening up another 1,875 kilometers of roads), training 35,000 small farmers to use environmentally sustainable practices, protecting 8,000 hectares of watershed, and providing credit to 17,450 farmers and 18,000 microentrepreneurs. (The target for

farmers receiving credit has been corrected to eliminate a double-counting error in the previously reported target.)

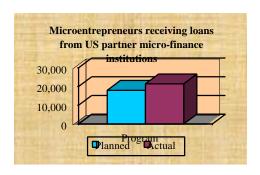
• USAID's partners have reported that, as of the March 31, 2001, approximately 143,000 households have benefited from Mitch assistance, exceeding the overall program goal of 100,000 families. Of these, 35,000 households have participated in food-for-work or cashfor-work programs, primarily for road rehabilitation and more than 53,000 households have incorporated environmentally sustainable agricultural practices on their farms (exceeding the original target of 38,000).

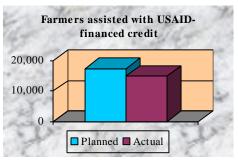


 Some 7,584 hectares of watersheds have been protected with stabilization efforts, rapidly approaching our target of 8,000 hectares.

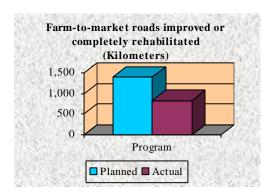


 Reconstruction funds and reflows have funded \$6.7 million of loans to 21,450 micro-entrepreneurs (over 75 percent of whom are women). Another \$5.5 million has been lent to approximately 14,800 farmers.





 468 kilometers of roads have been rehabilitated and another 366 kilometers have been improved. Principal partners are CARE, Adventist Development Relief Agency, Save the Children, and Project Concern International.



- The road program has benefited over 33,600 families living in nearly 700 communities and has, in turn, opened up access to another 973 kilometers of roads that would have otherwise remained isolated from the nation's broader transportation network.
- Under the supervision of the US Corps of Engineers (USACE), the Nicaraguan Ministry of Transportation and the Nicaraguan Army Corps of Engineers

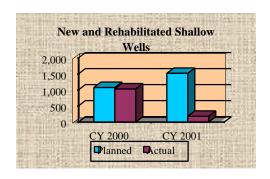
erected a prefabricated steel paneled ACROW bridge during a four-day hands-on workshop.

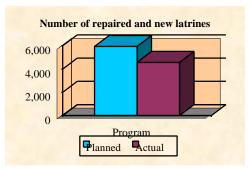
- CRS and CARE under the engineering supervision of the USACE will replace three additional bridges destroyed by Mitch.
- USAID will also expand agriculture programs by Catholic Relief Services (a pilot small farmer drip irrigation program), CARE (the renovation of irrigation infrastructure), and CLUSA (an organic coffee program).

Public Health

This component is improving the health of families in Mitch-affected communities by increasing access to health services and rehabilitating or installing rural water and sanitation systems. After reviewing the NGOs' second year work plans, USAID and the Ministry of Health increased targets for repairs or construction as follows: 2,555 shallow wells, 210 deep drilled wells, and 5,943 latrines. The target for construction of seepage pits was reduced to 830 pits, but the reduction will be partially offset by the addition of a new activity to construct 260 compost latrines. Further, to clarify the number of institutions that will be reconstructed, the targets are restated as one hospital (completed), six major and two minor health centers, 19 health posts, and housing for staff adjoining 22 of these facilities. Training and health education is also provided to families in remote rural areas affected by Mitch.

- 1,215 shallow wells and 4,575 latrines have been built or repaired; 110 deep wells have been drilled.
- 172 drainage seepage pits have been built. This target was severely cut back due to the difficulty of approving designs suitable for areas with a high water table.





- On March 8, Profamilia, Nicaragua's leading private non-profit health care provider, opened a new health center in Tipitapa. Within two weeks, the center was providing primary health services to over 40 patients daily and is also serving, unexpectedly, as the emergency trauma center for accidents and injuries in the area. Project contractors completed a second clinic in Esteli and work is nearing completion of a third in Sebaco, both scheduled for inauguration in April. Construction on three additional clinics will begin next quarter, in Somoto, Rio Blanco and Jalapa. The clinics use new, earthquake resistant building materials, setting a new standard for both construction and patient care in Nicaragua.
- Prosalud completed reconstruction of eight more MOH health posts, bringing the total thus far to ten. Prosalud finished housing facilities for medical staff in thirteen sites, for a total to date of sixteen new housing facilities.
- Prosalud is completing a system of repeater stations that will extend radio communication coverage for Ministry of

Health facilities to 60% of the country. Twelve stations have been installed. Prosalud also bought 43 mobile radios for ambulances and twelve vehicles.

• Johns Hopkins University inaugurated the "Blue Bus" and "Blue Star" initiatives for a mass media campaign in hand washing and hygiene education. The "Blue Bus", a school bus equipped with multi-media, inter-active material on health and sanitation, is a traveling exhibit and health fair focusing on children. This quarter, the Blue Bus visited 49 Mitch-affected communities, reaching approximately 10,320 participants.





 NicaSalud and its 21 PVO/NGO grantees provided: child survival and maternal health supplies and equipment for MOH health centers and posts in five departments of Nicaragua. They also provided training in the integrated management of childhood illnesses to 110 MOH personnel, 110 community

- health volunteers, and 20 municipal health directors; as well as training in control of diarrheal diseases and acute respiratory infections for 3,000 participants.
- Alistar's "Movie Boat" presentations focusing on teenage reproductive health reached 5,820 people in indigenous river communities on the Coco River.

 Participants include parents, community health workers, and local clergy.
- NicaSalud grantees used a "Child-to-Child" strategy to train 1,846 children in schools and communities, who in turn repeated these health messages to reach an average 2,900 children per month. This strategy has promoted changes in attitudes about family and community health, encouraged children to educate families and communities about health decisions; and promoted tree planting around schools.
- In malaria-endemic municipalities of Jinotega, volunteers worked in 55 mosquito breeding sites to eliminate 6,269 square meters of swamp, filling in 4,426 square meters and building 80 meters of drainage. Community malaria control volunteers made 1,938 follow-up visits to evaluate their work.
- When an outbreak of diarrhea in Jinotega affected 500 children, killing seven, partner NGOs and PVOs worked with the MOH to control the epidemic quickly and reduce the number of deaths. (18 deaths occurred during a similar outbreak last year.)
- During the past year the percentage of mothers that can recognize acute diarrheal disease increased from 34% to 75%, while the percentage of mothers who could treat it with oral rehydration solution increased from 23% to 45%.

School Rehabilitation

USAID originally planned to re-equip, refurnish, and re-supply 570 classrooms in addition to establishing 25 Resource and Outreach Centers in Mitch-affected areas. The last activity was subsequently dropped due to host government resource constraints. Funds were re-programmed to install or rehabilitate potable water systems and latrines in 180 schools, to train teachers to meet the special needs of students traumatized by the hurricane, and to provide teenagers practical skills in after school sewing, auto repair and carpentry training.

In coordination with the Ministry of Education and the World Bank, USAID has expanded the number of classrooms to be assisted to 675 in 222 schools, serving more than 26,000 students. Assistance consists of replenishment of school and teaching materials, supplies, classroom equipment and furniture to be provided through six deliveries over two school years.

- By March 31, the fourth replenishment of school materials and supplies (and the first one of the 2001 school year) was delivered, consisting of 30,000 packets for students and teachers in 675 classrooms. Students returning to class in February benefited from the improved conditions in their schools and classrooms and teachers were equipped with basic resources to start the school year off right.
- Local artisans and small businesses are manufacturing approximately 5,500 pieces of furniture to refurnish schools. In the first round of deliveries, three schools in Leon department received 133 chairs and 67 desks, benefiting 141 students.
- Small-scale repair work was completed on four Pacific-region schools (benefiting 220 students and 8 teachers), and 16 schools in the Río Coco area

- (benefiting 2,790 students and 63 teachers), completing this component.
- Work began (using re-programmed funds) to install or rehabilitate potable water systems and latrines in schools. Contractors selected 105 beneficiary schools in the Pacific region and 15 schools in the Río Coco region, and already awarded a sub-contract for drilling 47 wells at Mitch-affected schools. A pilot program in four schools near Managua is nearing completion.
- In March, the first psycho-social "emotional" recovery training of the school year was held at the Nueva Vida school. At this workshop teachers learned ways to help children reduce stress and approaches to teaching in the context of disaster recovery.
- Throughout the quarter, local NGOs provided after-school activities and practical skills training services to 257
 Nueva Vida students. These activities are proving beneficial for participating children: school retention, academic performance, discipline, and student-teacher relations have improved, and children show greater interest in personal advancement.

Disaster Mitigation

The Mitch-funded program includes disaster prevention and mitigation efforts such as the construction of drainage and flood control structures, clearing of water ways, and soil stabilization and conservation activities in areas that are prone to flooding, landslides, or other natural disasters.

A multi-donor coordination group including USAID, the National Oceanic and Atmospheric Administration (NOAA), the United States Geological Survey (USGS), the Federal Emergency Management Agency (FEMA), the United States Army

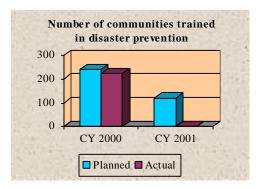
Corp of Engineers (USACE), and the United States Department of Agriculture (USDA) has been established to help communities prepare for disasters. Training for residents in 350 communities will improve Nicaragua's capacity to prepare for and respond to disasters.

 USAID funds are being used to reduce vulnerability to flooding and other natural disasters, targeting more than 80 sites for disaster mitigation work and benefiting more than 9,000 people in 228 communities.



- The Cooperative League of the United States of America's (CLUSA) stabilized stream channels to reduce the threat of flooding; and Save the Children used Food for Work to divert a stream that changed course during Mitch and subsequently flooded two communities during the 2000 rainy season.
- 21 kilometers of waterways out of a target of 66 kilometers have been cleared of debris and rubble.
- CARE, through community food-forwork, built gabions to protect a well and access road in Los Calpules, in the Department of Estelí, a remote community of 140 families. Similarly, CARE supported community efforts to restore the riverbank and protect the water supply in Esquipulas, a small farming community of 25 families.

• A total of 229 communities have been trained in disaster prevention. In the remote indigenous region of the Rio Coco, USAID-supported NGOs have developed regional and local emergency plans and risk maps for three municipalities encompassing 72 communities. Three emergency committees have been formed in four of the six indigenous territories of the Bosawas Biosphere reserve.



- Save the Children, in collaboration with Civil Defense, the Red Cross, and local municipal authorities, has completed emergency plans, training, and risk maps for 73 communities in the high risk Pacific volcanic chain area, (municipalities of Chichigalpa, El Realejo, Chinandega and Telica).
- USACE fielded a team of dam safety experts that worked with engineers of Nicaragua's Institute of Territorial Studies (INETER) and Electric Company (ENEL) to evaluate four Mitch-affected dams. Two of the dams were found to be seriously damaged. Failure of either structure would be catastrophic, since they produce one third of the nation's electrical power. USAID and USACE reprogrammed \$400,000 to finance designs for the repair of these two structures.

Municipal Restoration

The role of local governments in reconstruction will be strengthened by USAID's preference to channel funds through local governments. Eleven projects, such as drainage ditches, road resurfacing and reinforcing riverbanks will be completed with community participation. (The previous target of 20 was reduced to permit reallocation of funds to higher priorities.)

- Three projects have been completed including repair of the Posoltega dike, construction of a containment wall in Matagalpa to control flooding by the Rio Grande River, and construction of storm drains for a 20-block area in the city of Leon.
- Four projects began construction in this quarter: street paving in Tipitapa and Palacaguina; and reconstruction of rural roads in the municipalities of Yalagüina and San Lucas.
- Four projects will begin construction in early April: storm drainage systems in the municipalities of Quezalguaque and Estelí, street paving in the municipality of El Tuma-La Dalia, and reconstruction of a river deck and platform in the municipality of Wiwilí.
- Eight projects were cancelled on advice from the USACE (US Army Corps of Engineers) because they could not be completed before the end of the reconstruction program due to the onset of the rainy season.
- Four additional projects were cancelled because the engineering designs had not

been completed and approved – making completion of the projects impossible before December 31, 2001.

Transparency and Accountability

USAID has obligated \$1 million to the Inter-American Development Bank (IDB) for a program to ensure transparency in the use of both donor and national disaster funds; anticorruption measures and accountability for Mitch-related programs and regular Government of Nicaragua (GON) programs. USAID's contribution leverages an IDB \$20 million loan that was approved in September 2000 to support the establishment of an Inspectorate to provide both concurrent and special audits of GON investment projects during reconstruction.

Program Monitoring and Management

 Private audit firms and the Defense Contract Audit Agency have completed fourteen audits, with no material findings.

Commentary: Most of the performance targets reflect the sum of activities described in the initially approved NGO programs. After reviewing the NGOs' workplans for 2001, USAID and the Government of Nicaragua shifted some emphases, tightened some of the standards, and negotiated more realistic targets in some areas. For example, USAID reprogrammed over \$1 million from activities that had either been terminated or were coming in under budget. CARE and the Cooperative League of the USA (CLUSA) will use some of these funds to expand road reconstruction and river bank stabilization activities. A tightening of the environmental standards meant that USAID scaled back the kilometers of roads reported last quarter as improved.

Creating New Economic Opportunities for Farmers

Coffee farmers of the Gorrión Cooperative in the northern community of Yalí inaugurated a wet processing coffee mill that could provide them a chance to earn higher prices for their coffee. The wet coffee mill not only improves the quality of the coffee but also is environmentally friendly.

The mill in Yali is one of five that are being installed in major coffee growing departments of Nicaragua through a USAID-financed project with the Cooperative League of the United States of America (CLUSA). These are also areas that were heavily affected by Hurricane Mitch in October 1998. Many small farmers lost their coffee crops that year.

By improving the quality of coffee, Nicaraguan producers will broaden market opportunities and receive higher prices for their coffee.

"We already have the proof," said Otoniel Rodriguez, president of the Gorrión Cooperative, referring to the benefits of the new mill, "We have buyers for our coffee and we are getting \$8 above the international price per hundred-weight for coffee processed at the mill."

With the drastic reduction in world coffee prices this year, the \$8 difference means a lot to the small producers in the Gorrión Cooperative. In addition, new market opportunities are already beginning to appear. Recently, on a "coffee-cupping" tour of Nicaragua, representatives of the Seattle-based Starbucks Coffee chain and Holland Coffee sampled the Gorrión cooperative's coffee and were impressed with the quality. And that's good news for the coffee farmers in Yalí.

Another USAID-funded project has helped secure a U.S. market link for onion growers in the Sébaco Valley who are exporting to the United States for the first time since Hurricane Mitch, when their entire harvest was destroyed. Keystone Marketing Inc. of Pennsylvania, which distributes fresh produce to U.S. companies including the nationwide Wal-Mart chain, is handling 56,250 forty-lb. cartons of onions from the farmers with a value estimated at approximately \$1 million. USAID also paid for a specialist to supervise work at the processing plant to ensure that the Nicaraguan onions meet strict United States Department of Agriculture (USDA) standards.

The sweet onion project is one example of USAID's market-led agricultural development activities. By increasing market opportunities for Nicaraguan farmers, USAID is laying the groundwork for the region's long-term economic development and future prosperity.



Gorrion Cooperative's Wet Mill

Sebaco Valley Onion Sorting and Packing Plant